

# Rempel et al. 2012: Depth and Chinook HSI (Delphi)

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Function Updated by stobias on Mon, 12/23/2024 - 16:25.

## Species Information

**Common Name:** Chinook Salmon  
**Genus:** *Oncorhynchus tshawytscha*

## Stressor Details

**Stressor Name:** Depth  
**Units:** m  
**Metric:** Water depth  
**Scale:** linear  
**Function Type:** continuous

## Life Stage & Context

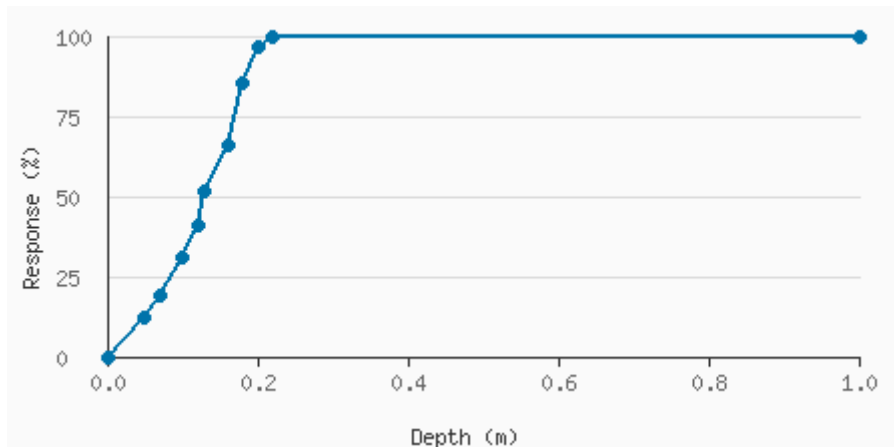
**Life Stages:** Fry

## Descriptions

### Overview

A wide range of depths were suitable for 0+ stream/ocean-type Chinook Salmon captured in spring. The wide depth suitability may be reflective of both shallow water use by stream-type fry and a broader distribution of migrating ocean-type fish. Depth suitability for Fraser gravel reach fish is similar to the WUP curve for Chinook fry, except that suitability declines past 80 cm for Fraser fish.

## Stressor Response Data



Stressor (X)	Mean System Capacity (%)	SD	low.limit	up.limit
-0.00	0.00	0.00	0.00	0.00
0.05	12.13	0.00	12.13	12.13
0.07	19.02	0.00	19.02	19.02
0.10	30.82	0.00	30.82	30.82
0.12	40.66	0.00	40.66	40.66
0.13	51.48	0.00	51.48	51.48
0.16	66.23	0.00	66.23	66.23
0.18	85.57	0.00	85.57	85.57

0.20	96.72	0.00	96.72	96.72
0.22	100.00	0.00	100.00	100.00
1.00	100.00	0.00	100.00	100.00

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## Citations

Rempel, L. L., Healey, K., & Lewis, F. J. A. (2012). Lower Fraser River juvenile fish habitat suitability criteria. Ecosystem Management Branch, Fisheries and Oceans Canada.

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## References

Rempel 2012 - <https://www.ecofishresearch.com/wp-content/uploads/2016/09/346413.pdf>